

RADIO MICROWAVE SERVICES Instructions and Worksheet



Department of Information Technology

The Department of Information Technology (DoIT) operates and provides several infrastructure-type services in support of individual agency communication needs, especially the mobile communication systems used by public safety agencies such as DMV, DPS, NDOT and DC&NR. These services include the following:

- **Dedicated Communication Circuits.** These are circuits (or “channels”) dedicated to and used exclusively by an agency. They are set up and operated on state-owned communication systems and maintained by state staff as opposed to circuits leased from commercial telephone companies. The circuits may be used in support of a mobile communication system, a data network, extension of telephone lines to remote locations (*i.e.* to a rural prison facility), or for special service communication circuits such as a permanent, multi-location audio teleconferencing circuit.

The dedicated circuits are provided via a microwave communication system operated by DoIT. The microwave system is a mix of older, analog-based technology and new high capacity digital-based technology. DoIT is in the process of upgrading the entire system to digital technology and has completed the connection between Reno and Las Vegas. Among other benefits, digital technology will allow more overall capacity and high speed rates for data transmission. Please look for future announcements of services and availability as this upgrade proceeds.

High capacity DS1 (1.544 Mb/s) and DS3 (45 Mb/s) data rates are supported on the new digital communications system providing connectivity between Reno, Carson City and Las Vegas.

- **Communication Site Equipment Space.** This is space at remote communication sites (rack space), usually located on mountaintops, and generally used for an agency’s mobile communication equipment. DoIT maintains space at 54 sites statewide for shared use by governmental agencies. The “space” actually consists of three service components: shelter space for the agency’s electronic equipment; tower space for mounting antennas; and power to operate the equipment.
- **Communication Support Technical Service.** These are communication system-related technical services including: maintenance of agency-owned mobile communication equipment; evaluation and feasibility of systems and equipment relative to new communication requirements; engineering, specification and budget preparation; and installation of new equipment and systems.

Generally, use of these services is triggered as a result of the present user agencies indicating a need to expand, continue or drop service, or as a result of DoIT recommendations to an agency. Present users of these services are contacted directly by DoIT for assistance with their budgeting. However, if your agency identifies a communication need that might be fulfilled through the above services or does not easily fit standard service categories, please contact **DoIT’s Communications Systems Unit at 775-684-5800** to discuss the application and use of these services.

Please note that any project (whether a mobile communication system or dispatch center or network expansion) that exceeds **\$1,000** in estimated cost will require submission of a **Technology Investment Request (TIR)**

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BUDGET CATEGORY	NUMBER OF HRS		CURRENT RATE	TOTAL COST	
	FY04	FY05		FY04	FY05
Dedicated Communications Circuits					
No. Of Channels Needed			\$1,660		
No. Of High Capacity DS-1’s Needed			\$632		
No. Of High Capacity DS-3’s Needed			\$9,345		
Communication Site Equipment Space					
No. Of Racks Needed			\$1,829		
TOTALS:					

Prepared By (Please Print)			
Name:		Date	
Title		Phone	
Signature			
Agency			

DoIT Review/Approval: _____ *Date:* _____